

REMARKS

In the Office Action mailed October 04, 2007, the Office took the following action: (1) requested affirmation of the elections in response to the restriction requirement; (2) rejected claims 31-34, 37-39, and 50-51 under 35 U.S.C. §101 as directed to non-statutory subject matter; (3) rejected claims 1-4, 7-14, 31-34, 37-41, 44-46, and 50-51 under 35 U.S.C. §112, second paragraph, as being incomplete for omitting essential steps; (4) rejected claims 50-51 under 35 U.S.C. §112, second paragraph, as being indefinite; (5) rejected claims 1-2, 7-13, and 50 under 35 U.S.C. §103(a) as being unpatentable over Miliefsky, U.S. Patent Publication No. 2005/0044418 (hereinafter "Miliefsky") in view of Moshir et al., U.S. Patent Publication No. 2004/0003266 (hereinafter "Moshir"); (6) rejected claims 3-4, 14, and 51 under 35 U.S.C. §103(a) as being unpatentable over Miliefsky in view of Moshir in view of Date ("An Introduction to Database System") (hereinafter "Date"); and (7) rejected claims 31-34, 37-41, and 44-46 under 35 U.S.C. §103(a) as being unpatentable over Moshir in view of Date. Applicants have canceled claims 50-53. Applicants respectfully traverse and further request reconsideration and withdrawal of the rejections in light of the following remarks.

Telephone Interview

Applicants thank the Examiner for the telephone interview conducted on Tuesday, January 22, 2008. During the telephone interview, Applicants' attorney, Damon Kruger, discussed the rejections under §112 and §103(a) of the pending Office Action.

Regarding the §112, second paragraph, rejection, Applicants' attorney presented arguments, some of which are reproduced below for the Examiner's subsequent consideration. In addition, Applicants have added additional remarks below which specifically address the Examiners concern regarding "omitted steps" in the independent claims as compared to Figure 3. No agreement was reached with the Examiner on this rejection. However, the Examiner is thanked for conveying his concerns regarding the §112 rejection which will further enable Applicants to address the rejection at issue.

Regarding the §103(a) rejection, Applicants' attorney presented two arguments consisting of elements in claim 1 that Applicants submit are not taught by the relied upon art. The first element of claim 1 includes "while the security engine continues to operate according to previous rules." Applicants' attorney understood the Examiner to agree that the Office Action did not address this feature from claim 1.

The second element of claim 1 includes "substantially concurrently." Applicants' attorney presented an analysis of Moshir, paragraphs [0075]-[0076], submitting that Moshir's rollback is not "substantially concurrently" because Moshir installs (switches) a computer program on a first computer to test it (see paragraph [0075]), and then rolls out the program to the rest of the computers, thus not having a switch that occurs "substantially concurrently" for all systems as recited in claim 1. On this issue, the Examiner and Applicants were unable to reach a consensus. Applicants thank the Examiner for considering the above arguments. These, and other remarks, are included below under their respective sections to assist the Examiner in more fully understanding the Applicants' position on the rejections under §103(a).

Rejections under 35 U.S.C. §101

The Office rejected claims 31-34, 37-39, and 50-51 under 35 U.S.C. §101 as directed to non-statutory subject matter under 35 U.S.C. §101 as directed to non-statutory subject matter. In the Office Action, the Office suggested “amending ‘computer readable medium’ to ‘computer storage medium.’” (Office Action, page 3, paragraph 3, lines 5-7). Without additional comment and without prejudice as to the merits of the rejection, Applicants have amended claims 31-34, 37-39 to recite “computer storage medium.”

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection to claims 31-34 and 37-39 under 35 U.S.C. §101. Claims 50-51 have been canceled.

Rejections under 35 U.S.C. §112, second paragraph

The Office rejected claims 1-4, 7-14, 31-34, 37-41, 44-46, and 50-51 under 35 U.S.C. §112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP §2172.01. In particular, the Office states on page 4-5 of the Office Action with reference to Figure 3:

- 1) “Regarding claims 1-4, 7-14, the omitted steps are: steps 306-312 and 316,”
- 2) “Regarding claims 31-34, 37-39, the omitted steps are: steps 306-310 and 316,”
- 3) “Regarding claims 40-41, 44-46, the omitted steps are: steps 304-310 and 316,” and
- 4) “Regarding claims 50-51, the omitted steps are: steps 306-312 and 316.”

As an initial matter, Applicants respectfully object to the Office's citation of "steps" to describe each process in a flowchart. In particular, Applicants submit that the processes and/or subprocesses disclosed in Figure 3 may be preformed in any order, in series or parallel, and therefore are not "steps" that may include a connotation that they must be completed in consecutive order. Herein, Applicants use the term "step" as being synonymous with the term "process," and will use the term accordingly throughout this Response to Office Action.

Applicants reproduce relevant portions of MPEP §2172.01 below:

A claim which omits matter *disclosed to be essential* to the invention as described in the specification or in other statements of record may be rejected under 35 U.S.C. 112, first paragraph, as not enabling. *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). See also MPEP § 2164.08(c). Such *essential matter* may include missing elements, steps or necessary structural cooperative relationships of elements *described by the applicant(s) as necessary to practice the invention*.

In addition, a claim which fails to interrelate *essential elements of the invention as defined by applicant(s)* in the specification may be rejected under 35 U.S.C. 112, second paragraph, for failure to point out and distinctly claim the invention. See *In re Venezia*, 530 F.2d 956, 189 USPQ 149 (CCPA 1976); *In re Collier*, 397 F.2d 1003, 158 USPQ 266 (CCPA 1968).

(MPEP §2172.01, emphasis added). As shown above, The MPEP states the elements must be (1) not disclosed in the claims, and (2) essential, as described by the applicant(s) as necessary to practice the invention. Without addressing whether claims 1, 31, 40, and 50 "disclose" the elements shown in Figure 3, Applicants submit that the elements are not "essential" because they are not "described by the applicant(s) as necessary to practice the invention" as required under MPEP §2172.01.

Applicants' specification on page 19, lines 9-10 states "Fig. 3 is a flowchart illustrating another *example* process 300 for updating a security policy." (Emphasis added). As such, the process described with relation to Figure 3 is an example of one of many possible approaches to providing a solution of the present disclosure. Therefore, the description of Figure 3 does not disclose "essential" steps or processes and MPEP §2172.01 does not apply to claims 1, 31, and 40.

In addition, the MPEP provides exceptions to the above quoted case law:

But see *Ex parte Nolden*, 149 USPQ 378, 380 (Bd. Pat. App. 1965) ("[I]t is not essential to a patentable combination that there be interdependency between the elements of the claimed device or that all the elements operate concurrently toward the desired result"); *Ex parte Huber*, 148 USPQ 447, 448-49 (Bd. Pat. App. 1965) (A claim does not necessarily fail to comply with 35 U.S.C. 112, second paragraph where the various elements do not function simultaneously, are not directly functionally related, do not directly intercooperate, and/or serve independent purposes.)

(MPEP §2172.01). As stated in *Ex Parte Huber*, where the various elements do not function simultaneously, among other instances, the claim does not necessary fail under Section 112, second paragraph. As shown in Figure 3 and described in the specification from page 9, line 19 to page 20, line 22, the elements (processes/steps) are not described as occurring simultaneously. In fact, simultaneous processing would not allow the process to successfully operate because each process requires time consuming actions to occur before another process can begin. Therefore, under *Ex Parte Huber*, Applicants submit that claims 1, 31, and 40 point out and distinctly claim the invention as required under §112, second paragraph and MPEP §2172.01.

In addition, Applicants submit that “omitted steps” may be implicitly included in the independent claims. For discussion, Applicants focus on claim 1 where the Office rejected claim 1 for omitting “steps” 306-312 and 316. Claim 1 includes the recitation “after each of the plurality of security engines is ready to begin using the new security policy.” Applicants submit that at least this recitation supports the process (steps) including in Figure 3, blocks 306-312, and therefore enables claim 1. Regarding block 316 which states “discarding results of processing new rules and/or data,” Applicants submit that this “step” is not necessary to enable claim 1. In fact, claim 1 may be enabled with only a portion of the processes included in Figure 3.

Claims 2-4 and 7-14 depend from claim 1; claims 32-34 and 37-39 depend from claim 31; and claims 41 and 44-46 depend from claim 40, thus claims 2-4, 7-14, 32-34, 37-40, and 44-46 are believed to be in compliance with 35 U.S.C. §112, second paragraph for their reliance on allowable base claims. Claims 50-51 have been canceled.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection to claims 1-4, 7-14, 31-34, 37-41, and 44-46 under 35 U.S.C. §112, second paragraph.

Rejections under 35 U.S.C. §103(a)

The Office rejected claims 1-2, 7-13, and 50 under 35 U.S.C. §103(a) as being unpatentable over Miliefsky in view of Moshir, rejected claims 3-4, 14, and 51 under 35 U.S.C. §103(a) as being unpatentable over Miliefsky in view of Moshir in view of Date and rejected claims 31-34, 37-41, and 44-46 under 35

U.S.C. §103(a) as being unpatentable over Moshir in view of Date. Applicants respectfully traverse.

Miliefsky generally pertains to providing “proactive network security systems that protect against hackers and may automatically find, report, and communicate with countermeasures and remove the common vulnerabilities and exposures (CVEs) that they exploit.” (Summary).

Moshir generally pertains to discovering software updates, discovering if a given computer can use the software update, and then updating the computers with software as needed automatically across a network without storing the updates on an intermediate machine within the network. (Summary). In addition, Moshir pertains to detecting failures, stopping a rollout, and removing software from computers that were already updated. (*Id.*).

In particular, Applicants respectfully submit that the relied upon references do not teach the following claimed features: (1) “each of the plurality of security engines processing at least a portion of the new security policy to establish new rules for operation of the security engine *while the security engine continues to operate according to previous rules*,” as recited in claim 1; (2) “switching, after each of the plurality of security engines is ready to begin using the new security policy, each of the plurality of security engines to the new rules *substantially concurrently*,” as recited in claim 1; (3) “*continue* to use a previous set of rules and associated data *until an indication* to begin using the new set of rules and associated data is identified,” as recited in claim 31; and (4) “using a previous set of rules until an indication to begin using the new set of rules is received,” as recited in claim 40. Applicants will now discuss each independent claim in turn.

Claim 1

Applicants' claim 1 recites:

A method, implemented in a computing device, the method comprising:

accessing a new security policy to be implemented by a plurality of security engines of the computing device and to be used by the plurality of security engines in place of a current security policy;

each of the plurality of security engines processing at least a portion of the new security policy to establish new rules for operation of the security engine while the security engine continues to operate according to previous rules; and

switching, after each of the plurality of security engines is ready to begin using the new security policy, each of the plurality of security engines to the new rules substantially concurrently.

Applicants submit that Miliefsky and Moshir, either singly or in combination assuming arguendo that such combination is proper, fail to teach or suggest the recitations of claim 1 for at least two reasons. First, the relied upon references do not teach “each of the plurality of security engines processing at least a portion of the new security policy to establish new rules for operation of the security engine *while the security engine continues to operate according to previous rules.*” The Office appears to rely on Miliefsky as teaching the above recitations, although the Office does not specifically identify a citation in the relied upon art for this recitation nor provide any discussion of this recitation. Applicants submit that neither Miliefsky nor Moshir teach “while the security engine continues to operate according to previous rules,” as is presently claimed. In particular, Moshir teaches testing new software on a computer: “For example, one embodiment of the monitor will test a patch application by having it installed

on only one target computer.” (Moshir, page 6, paragraph [0075]). However, this is not equivalent to “each of the plurality of security engines processing at least a portion of the new security policy to establish new rules for operation of the security engine while the security engine continues to operate according to previous rules,” as recited by claim 1.

Second, the relied upon references to do not teach or suggest “switching, after each of the plurality of security engines is ready to begin using the new security policy, each of the plurality of security engines to the new rules *substantially concurrently*,” as is presently claimed. The Office states, “Miliefsky does not disclose switching, after each of the plurality of security engines is ready to begin using new security policy, each of the plurality of security engines to the new rules substantially concurrently.” (Office Action, page 6, lines 10-12). Applicants agree with the Office regarding this statement. However, the Office relies upon Moshir as teaching these recitations, with which the Applicant does not agree.

The Office states, “Specifically, Moshir discloses that the security policies for the plurality of security engines are *updated at the same time, i.e., a scheduled rollout*, and each security engine is to report the result of the update, whether a success or failure/error.” (Office Action, page 6, lines 15-18, emphasis added). Applicants provide the relevant sections of Moshir that were cited by the Office. First, paragraph [0030] discusses installation and rollback as follows:

[0030] A monitor checks to see that the software installs properly on the target 202, 208, and then continues checking (or can be notified) to ensure that the updated software runs correctly and that the target computer itself doesn't experience any problems in what appear to be unrelated areas. Should the package fail to install properly, or create

problems for the software program that was patched, or create other problems on the target computer, the package can be automatically removed and the computer restored to its preinstalled state or another acceptable state in which the update has been removed or disabled, and the target computer is in a workable state. *If the package has been installed on more than one computer, they all can be removed. If the error occurs in the middle of a rollout to many computers, the rollout can be halted and the software removed or disabled.* The monitor may be located on the update server 220, on a repository site 600, at least partially in the update agent 204, 210, and/or in a combination of such locations.

(Moshir, paragraph [0030], emphasis added). However, this does not indicate or even imply “switching, after each of the plurality of security engines is ready to begin using the new security policy, each of the plurality of security engines to the new rules substantially concurrently.”

In addition, Moshir includes the following paragraphs that were relied upon by the Office.

[0075] If the monitoring step detects a failure 316, then the task that failed is suspended 318. The first download 308 to the update server 528 could fail, as could the second download from the update server 528 to the target computer 500. If there are multiple target computers having the software update installed, the Nth installation could fail, and so on. Determining results preferably goes beyond simply ensuring that the software update appears to have installed properly, and in some embodiments of the invention extends for a time beyond the installation. *For example, one embodiment of the monitor will test a patch application by having it installed on only one target computer, assuring that it downloads properly, installs it and then watching it for some period of time until the administrator who sets the time delay gains enough confidence in the patch to allow it to be applied to other target computers. Should the application of this patch cause abnormal activity, as noticed by undesirable behaviors either in the program whose software was modified or elsewhere in the computer, the rollout can be automatically suspended until the problem is resolved.*

[0076] Furthermore, in some instances when failure is detected the software update is disabled or removed 324 from the target computer, *and that machine is returned substantially to its pre-update state or another acceptable (working) non-update state*. This may mean that the installed software is taken off the target machine 322; or that not only is the software removed, but all the ancillary files (.dll's, .exe's, etc.) are restored to their pre-update state. In other instances it may mean that the target computer or some portion thereof was backed up before the software update was installed, and the backup itself is restored onto the machine.

(Moshir, paragraphs [0075]-[0076], emphasis added). First, paragraph [0075] provides an example having a target computer installing a download and then using it. Further, paragraph [0076] discloses, “machine is returned substantially to its pre-update state or another acceptable (working) non-update state.” Applicants submit that this disclosure in Moshir actually teaches away from the recitations including “substantially concurrently” as recited in claim 1. In particular, Applicants submit that Moshir does not teach or suggest “updated at the same time, i.e., a scheduled rollout,” and further that a “scheduled rollout” does not imply “the same time.” As described above in the quoted paragraphs of Moshir, the description of a rollout describes a one-after-another or consecutive-type of rollout spreading over a period of time. Thus, Moshir teaches away from a rollout that is “substantially concurrently” as recited in claim 1.

Claims 2-4 and 7-14 depend from claim 1, and thus are believed allowable at least for their dependency on the allowable base claim 1. Further, the additional limitations in these dependant claims provide limitations which are not taught by the cited reference. Although all dependant claims may recite limitations not disclosed by Blair, only one claim is discussed below for sake of brevity.

Applicants respectfully submit that the above references, including Date, do not teach the recitations of claim 14. More specifically, they do not teach at least “writing a value to a shared data structure; and firing an event across all of the security engines at once.” More specifically, the “commit” process disclosed by Date does not teach “firing an event across all of the security engines at once.”

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections to claims 1-4 and 7-14.

Claim 31

Applicants’ claim 31 recites:

One or more computer readable storage media having one or more instructions that, when executed by one or more processors, causes the one or more processors to:

receive an indication of a new security policy to be used;
generate a new set of rules having associated data based on the new security policy;

continue to use a previous set of rules and associated data *until an indication* to begin using the new set of rules and associated data is identified; and

using, upon identifying the indication, the new set of rules and associated data.

Applicants submit that Moshir and Date, either singly or in combination assuming *arguendo* that such combination is proper, fail to teach or suggest “*continue* to use a previous set of rules and associated data *until an indication* to begin using the new set of rules and associated data is identified.” Applicants rely on at least the reasoning above as applied to claim 1 in support of claim 31. In particular, Applicants submit that Moshir fails to explicitly teach “continue to use a previous set of rules.”

Claims 32-34 and 37-39 depend from claim 31, and thus are believed allowable at least for their dependency on the allowable base claim 31. Further, the additional limitations in these dependant claims provide limitations which are not taught by the cited reference. Although all dependant claims may recite limitations not disclosed by Blair, only one claim is discussed below for sake of brevity.

Applicants submit that Date fails to teach or suggest “identifying, in a shared data structure, a value indicating to begin using the new set of rules and associated data; and detecting that an event being polled has been fired,” as recited in claim 38. Applicants rely on at least similar reasoning as presented above regarding claim 14.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections to claims 31-34 and 37-40.

Claim 40

Applicants’ claim 40 recites:

A method, implemented in a security engine of a computing device, the method comprising:
receiving a new set of rules to be enforced;
using a previous set of rules until an indication to begin using the new set of rules is received; and
enforcing, in response to receipt of the indication, the new set of rules.

Applicants submit that Moshir and Date, either singly or in combination assuming *arguendo* that such combination is proper, fail to teach or suggest “using a previous set of rules until an indication to begin using the new set of rules is received.” Applicants rely on at least the reasoning above as applied to claim 1 in

support of claim 40. In particular, Applicants submit that Moshir fails to explicitly teach “using a previous set of rules until an indication.”

Claims 41 and 44-46 depend from claim 40, and thus are believed allowable at least for their dependency on the allowable base claim 40. Further, the additional limitations in these dependant claims provide limitations which are not taught by the cited reference. Although all dependant claims may recite limitations not disclosed by Blair, only one claim is discussed below for sake of brevity.

Applicants submit that Date fails to teach or suggest “identifying, in a shared data structure, a value indicating to begin using the new set of rules and associated data; and detecting that an event being polled has been fired,” as recited in claim 45. Applicants rely on at least similar reasoning as presented above regarding claim 14.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections to claims 41 and 44-46.

Conclusion

Claims 1-4, 7-14, 31-34, 37-41, and 44-46 are in condition for allowance. Applicants respectfully request reconsideration and issuance of the subject application. Should any matter in this case remain unresolved, the undersigned attorney respectfully requests a telephone conference with the Examiner to resolve any such outstanding matter.

Respectfully Submitted,

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Dated: 2008-02-04

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